

REMARKS

Applicants gratefully acknowledge the personal interview conducted with the Examiner on May 6, 2003. During the course of the interview, applicants' representative met with the Examiner and discussed all of the outstanding claims in light of all of the prior art relied upon by the Examiner in the outstanding Official Action. There was no agreement reached as to the status of the outstanding rejections; however, the Examiner stated that he would carefully consider applicants' arguments made during the interview when applicants made those arguments of record in a response to the outstanding Official Action. This response and request for reconsideration reiterates and confirms applicants' arguments presented during the in person interview.

During the personal interview, applicants' representative principally argued that the outstanding rejection failed to identify any suggestion or motivation for combining the Kohn '991 reference with the Nakagawa '957 reference. By not showing any teaching, suggestion, or motivation for combining those references, the rejection fails to present a *prima facie* case for combining those references in such a way as to arrive at the applicants' invention. Accordingly, the rejection under 35 U.S.C. §103 is fatally deficient and should be withdrawn. During the interview, the Examiner stated that the applicants' position was reasonable on its face; however, the Examiner was obligated to discuss the rejection and responsive arguments with his SPE and perhaps conduct an additional search. Thus, no agreement was reached.

The subject of the pending application is a bottle having a wall structure comprising an intermediate layer of foamed plastic, and outer, solid layers of plastic. The plastic of the foamed intermediate layer is a mixture of a first rigid polymer component selected from the group consisting of high density polyethylene and high melt-strength polypropylene and a second ductile polymer component selected from the group consisting of low density polyethylene and polypropylene, wherein the mixing ratio of the first rigid polymer component to the second ductile polymeric component in the foamed plastic layer is between 1:3 and 3:1. The plastic of the outer, solid layers is the same as said rigid polymer component of the foamed intermediate layer.

The outstanding rejection fails to identify a combination of teachings within the art that suggest the present invention as claimed. The Kohn '991 reference describes a bottle-type container having an intermediate foamed layer and outer solid layers. Each of those three layers are fabricated of high density polyethylene, albeit with the intermediate layer being foamed high density polyethylene. As the Examiner acknowledges, the Kohn '991 reference fails to disclose an intermediate layer of a blend of rigid high density polyethylene and ductile low density polyethylene. The Kohn '991 reference makes no reference, and does not suggest, the combination of both a rigid and ductile polyolefin within the foamed intermediate layer. The reference states, in the paragraph bridging columns 1 and 2, that the expanded plastics material is a polyolefin, and states that it can be polypropylene or polyethylene or their copolymerides. However, the reference does not suggest combining both a rigid high density polyethylene and a ductile low density

polyethylene and/or high/low density polypropylene. Nor would one of ordinary skill in the art interpret the reference to "copolymerides" as embracing such a combination. The reference states "the foamed plastic 3 is preferably a polyolefin, such as polypropylene or polyethylene or their copolymers." One of ordinary skill in the art would understand the reference as suggesting a foamed plastic layer comprising a copolymer of polypropylene and polyethylene, and not a combination of a rigid high density polyethylene with a ductile low density polyethylene. Such a combination would not be a copolymer as that term is commonly used in the art. Indeed, such a combination would run contrary to the objective of the application, which is to devise a container of reduced material input that does not kink and exhibits high stability when the shell wall is squeezed for measured dispensing of the contents. As it would not be consistent with the objective, one of ordinary skill would find within the reference no motivation for deviating from the rigid high density polyethylene, much less so in the direction of a low density polyethylene.

Further, the Kohn '991 reference expressly states,

Only the density range *and other features described* assure that all the above mentioned requisite functions are fulfilled (in particular, the avoidance of kinking). Significant deviations result in a deterioration of properties relevant to serviceability such as a reduction of the squeezability and undesirable kinking or a loss of subjective product quality appeal and to unfavorable conditions for the manufacture of the container.

Thus, the Kohn '991 reference, by its own explicit teaching, states that the purpose of the invention will be frustrated by further manipulation of the various features described within the reference. The reference teaches away from any substantial deviation from its own

explicit teaching, and thus one of ordinary skill in the art would not be motivated by the teaching of this reference to substitute the foamed layer with the dual component foamed layer presently claimed by applicants.

Even if one were to ignore the explicit teaching of the Kohn '991 reference, the outstanding rejection fails to provide any teaching or motivation for combining the teaching of the Kohn '991 reference with that of Nakagawa '957 reference.

The Nakagawa reference describes a bottle comprised of a three layer structure. The two outer layers are fabricated of high density polyethylene, and the intermediate layer is fabricated of a foamed low density polyethylene layer. The reference generally relates to the fabrication of articles that are not generally easily fabricated in a blow molding process, and which feature a projection. The reference does, however, describe a three layer structure that can be used in the fabrication of, for example, a bottle (column 5).

However, as is evident from a careful reading of column 5, lines 27-51, the description of the article produced and illustrated in Figure 6, is merely an example of an article fabricated according to that reference where the projection is the mouth of the bottle, which must be fabricated of a relatively rigid material because threads are formed at the outer peripheral surface thereof. Column 5, lines 37-40. Thus, the reference to the bottle here is merely an example of an article of manufacture comprising a projection wherein the mouth of the bottle is the projection, and because of the structural features required of such a bottle, the bottle must be fabricated of materials having different properties. The

reference does not seem to suggest that the laminate structure of the bottle walls, per se, are innovative.

The Nakagawa '957 reference describes a device for manufacturing bottles such as those illustrated in Figure 6. Column 10, line 8 - Column 11, line 20. More specifically, at column 10, line 8 through column 10, line 34, the Nakagawa '957 reference describes various materials that may be used to fabricate the plastic bottle described generally at column 5. Here, however, Nakagawa et al. make it quite clear that the materials of the outer layers and the intermediate foamed layer are different. Nowhere within this reference is there any suggestion or motivation to utilize as a portion of the foamed intermediate layer a plastic material that is the same as the outer layer. Moreover, there is no suggestion or motivation to utilize a combination of a rigid polyolefin with a ductile polyolefin. Rather, the reference states that in such a bottle, "the sandwiched layer and the two sandwiching layers are comprised of respective different materials." Column 10, lines 12-14. Indeed, in the table at Column 10, none of the materials proposed for the sandwiched layer constitutes a blend of both a rigid polymer and a ductile polymer. Nor is there any suggestion within the reference to combine two such components as the sandwiched layer.

Applicants submit that the rejection fails to identify any teaching or suggestion of the present invention. The outstanding rejection does not identify any suggestion in either or both of these references that would have motivated one of ordinary skill in the art to combine these references. Moreover, even if one of ordinary skill in the art were to

combine these two references, there is no suggestion within either of these references that one of ordinary skill in the art would arrive at the presently claimed invention. That is, there is no suggestion within either reference that the foamed (sandwiched) layer should be modified and if it should be modified, then it should be modified so as to comprise both a rigid and ductile polymer. Finally, there is no teaching or suggestion within either of the cited references, that, even if one were to combine the references in such a way as to modify the foamed layer so as to comprise both a rigid and ductile polyolefin material, that one would likewise have selected the outer layer such that it matches the rigid polyolefin of the foamed intermediate layer. In the absence of such teachings or suggestions, the outstanding rejection is improper and should be withdrawn.

In view of the foregoing amendments and remarks, applicants respectfully submit that the pending claims are in condition for allowance. Applicants respectfully request formal notification to that effect. If, however, the Examiner perceives any remaining

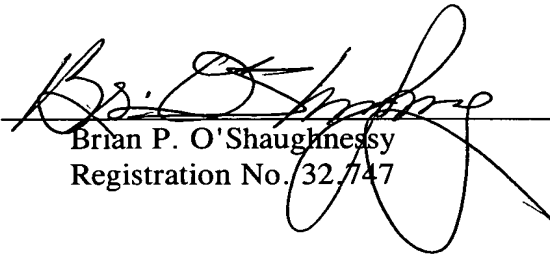
impediments to such a notice of allowance, applicants respectfully request the Examiner call applicants' attorney at the number provided below. Such informal communication will expedite examination and disposal of the instant case.

Respectfully submitted,

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